SHMH ESA

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

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Office of Preparedness & Response

Sherry Adams, Director Isaac P. Ajit, Deputy Director

November 2, 2012

Public Health & Emergency Preparedness Bulletin: # 2012:43 Reporting for the week ending 10/27/12 (MMWR Week #43)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts

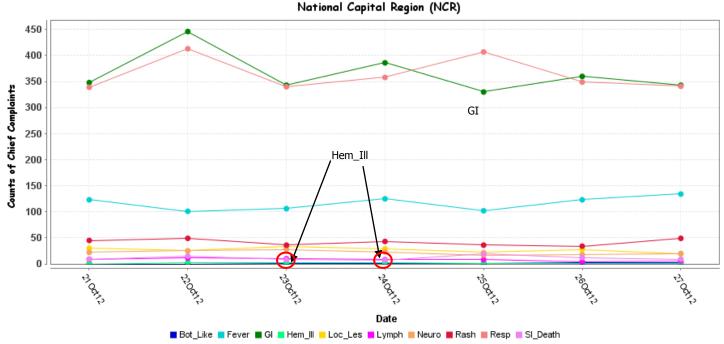
Maryland: Level One (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

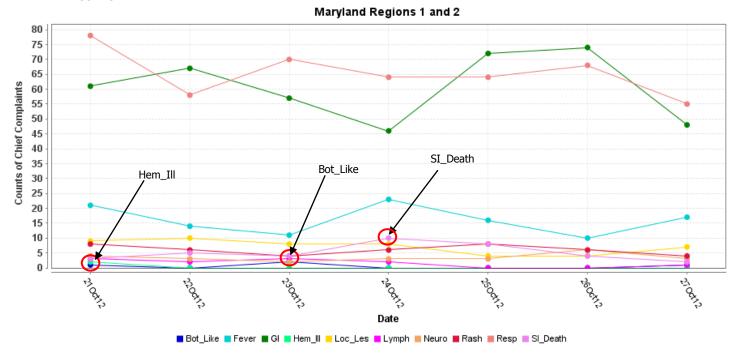
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

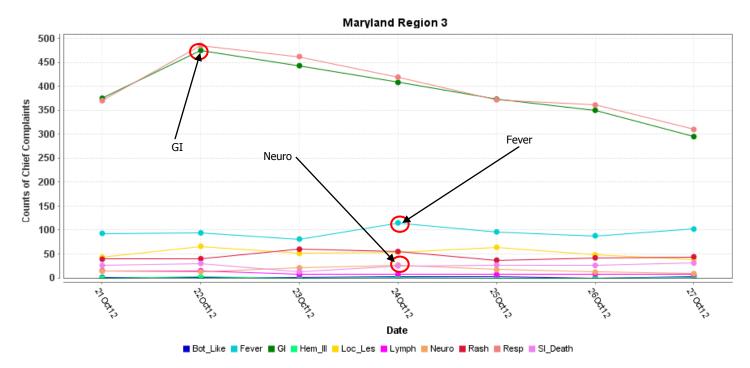
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



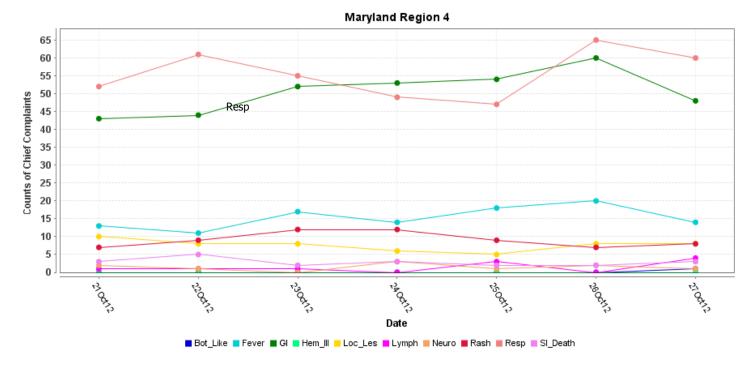
MARYLAND ESSENCE:



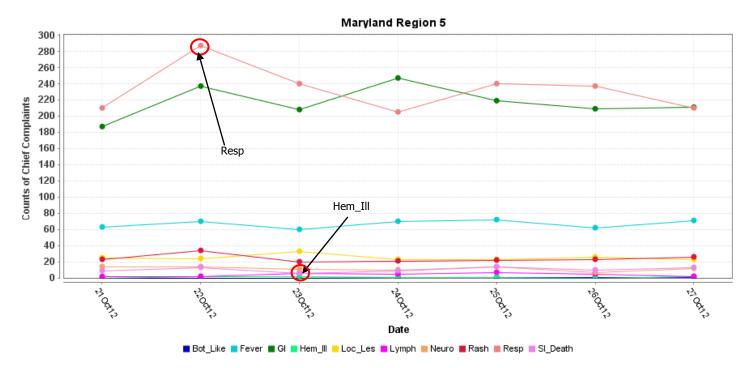
^{*} Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



^{*} Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



^{*} Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

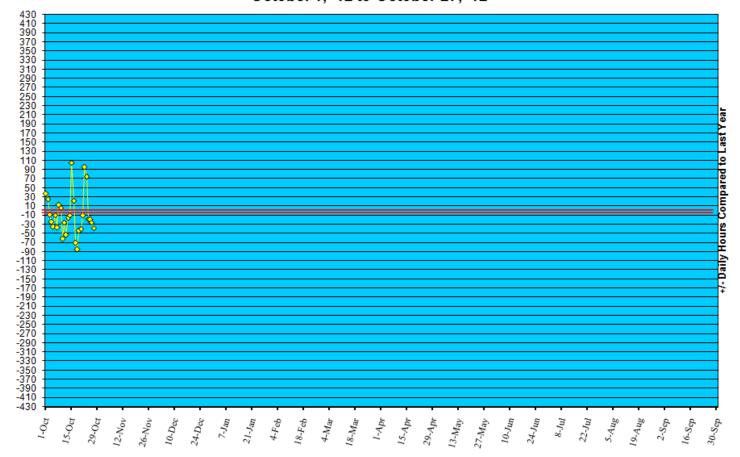


^{*} Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '12 to October 27, '12



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (October 21 – October 27, 2012):	17	0
Prior week (October 14 – October 20, 2012):	7	0
Week#43, 2011 (October 23 – October 29, 2011):	24	0

1 outbreak was reported to DHMH during MMWR Week 43 (October 21-27, 2012)

1 Rash illness outbreak

1 outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a Daycare Center

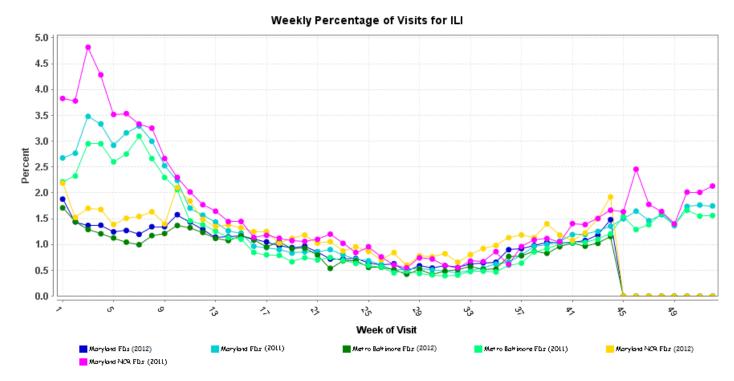
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 42 was: Sporadic Activity with Minimal Intensity.

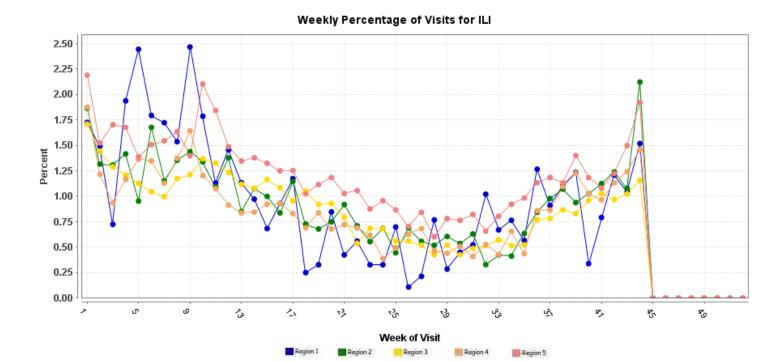
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



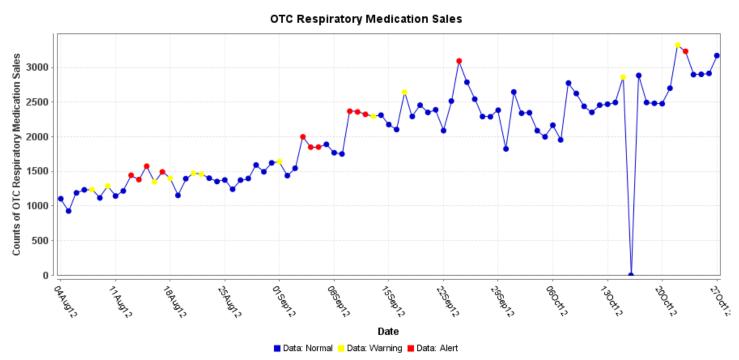
^{*} Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic. As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (NORTH CAROLINA): 22 October 2012, More than 3 weeks after an *E. coli* outbreak hit the Cleveland County Fair [North Carolina], the fairgrounds have shut down for other events. According to the fairgrounds website, the grounds are "temporarily close[d to] all public events at the fairgrounds pending the completion of the current state and local health department investigations." The statement says until "the exact source and DNA identity of the strain or strains of the current *E. coli* bacterium are determined" it was in the best interest of the general public to close the fairgrounds. On Fri 19 Oct 2012, health officials told WBTV that 106 people had been sickened with possible *E. coli*, 1 toddler died from his illness, after visiting the Cleveland County Fair. "In the wake of this situation and as more cases are confirmed, the Cleveland County Fair is working diligently with all of our local and state health partners to investigate, locate and identify the source of this outbreak." This suspension will remain effective until more information is released from state and local health agencies and the NC Department of Agriculture. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

ANTHRAX (ARMENIA): 21 October 2012, Armenia's Ministry of Health received an alarm with respect to suspicious anthrax cases recorded in the Vardenis district of the Gegharkunik region, the ministry informed Armenian News-NEWS.am. As a result, an epidemiological study was conducted on location, and laboratory research samples were taken from the persons who are suspected of having caught this disease. The results will be known within the next few days. Preventive measures are in progress. Spokesperson Babken Pipoyan of the Agriculture Ministry's State Service on Food Safety said on Friday [19 Oct 2012] that the last time anthrax was recorded in Armenia was 3 years ago. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

EBOLA (DEMOCRATIC REPUBLIC OF CONGO): 21 October 2012, Muslims living in the Democratic Republic of Congo (DRC) will not participate in the pilgrimage to Mecca this year [2012]. The Saudi government has taken this decision to avoid transmission of Ebola virus disease and cholera, which exist in many parts of the country. The President and Legal Representative of the Islamic Community in the DRC (Comico), Sheikh Abdallah Mangala, confirmed this information on Tue 16 Oct 2012. Sheikh Abdullah Mangala stated that the Saudi government was acting "to protect the lives of other pilgrims in deciding that the Muslims who live in the DRC should not participate in the pilgrimage this year [2012]. This is a responsible decision by the Saudi government in view of the fact that over 2 million people will be visiting Saudi Arabia. Islam itself requires that you should not expose yourself to harm," the sheik said while calling for Muslims in the DRC to pray for their country. "However, we implore the almighty to give the Congolese government officials strength and wisdom to eradicate this epidemic and enable pilgrims from the DRC to visit Mecca next year [2013]. However, the World Health Organization (WHO) says it has not recommended any restriction of movement to or from the DRC to neighboring countries as a consequence of these epidemics. The Resident Representative of the WHO, Doctor Leodegat Bazira, told Radio Okapi on Tue 16 Oct 2012 that the Ebola virus disease epidemic in the eastern part of the DRC was stabilizing. "As of 14 Oct 2012, there have been 75 cases with 36 fatalities. If we look at the number of deaths recorded during the course of the epidemic, we consider that the rate of detection of cases is not increasing, and the number of deaths has stabilized at 36. This stabilization is the result of the implementation of interventions such as the establishment of isolation facilities and surveillance activities." The Ebola virus disease outbreak was declared in the DRC in August 2012. It has occurred mainly at Isiro in Orientale province. The Department of Health has recommended preventive measures to avoid spread of the disease. "The sooner preventive measures are applied, the faster the spread of disease will be stopped," said Minister Felix Kabange in August 2012, urging the Congolese population to avoid touching any animal found dead in the forest or consuming its meat. "You should also avoid touching the blood, vomit or urine of any patient suffering from a viral hemorrhagic fever, or a deceased person," he added. In the case of cholera, the Ministry of Health and WHO have recorded more than 19 000 cases between January and June 2012. The most affected provinces are: Ecuador, Bas-Congo, South Kivu and Orientale. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

MARBURG (UGANDA): 21 October 2012, The Ministry of Health in Uganda has declared an outbreak of Marburg hemorrhagic fever [Marburg virus disease] in Kitumba sub-county, Kabale district in southwestern Uganda. Blood samples from 3 cases have tested positive for Marburg at the Uganda Virus Research Institute (UVRI). Investigation into the outbreak is ongoing. The Ministry of Health (MOH) is working closely with partners to control the outbreak.

The MOH and WHO have deployed a team to the district to support the outbreak investigation and response, including case contact tracing. The national and district taskforces have been reactivated. WHO will provide support to the national authorities as needed in the areas of coordination, infection

prevention and control (IPC), surveillance, epidemiology, public information and social mobilization, anthropological analysis, and logistics for outbreak response. With respect to this outbreak, WHO does not recommend that any travel or trade restrictions are applied to Uganda. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

TRICHINELLOSIS (ARGENTINA): 25 October 2012 The Director of Food Science Omar Olivera, told the Voice that 59 people contracted trichinosis from eating infected pork meat, a product that was acquired in all cases from the same street vendor. In this regard the [Tandil partido, Buenos Aires province] municipal official said the district legal counsel is considering whether to take legal action against the person who sold the pork sausages contaminated with trichinella. The official also said that of the 59 persons affected, 46 consulted the Ramon Santamarina Municipal Hospital with symptoms of trichinellosis, while the other 13 sought treatment once they had gone through the 1st stage [of the disease]. Initially 10 cases had been reported. All those affected had eaten sausages sold door to door by a neighbor. With data collected in a timely fashion, municipal [authorities] seized the sausages, about 250 kilos, ready to be sold. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

TRICHINELLOSIS (RUSSIA): 25 October 2012 According to the press service of the Investigation Department of the [Investigative Committee of Russia] in the Krasnoyarsk Territory, a criminal investigation under article "The production, transportation, storage, or sale of products not meeting the requirements of security" has been initiated after the confirmation of 19 cases of trichinellosis of which one woman died. According to investigators, between 1 and 16 Oct 2012, the infectious [disease]department of the Norilsk hospital admitted 19 people with a diagnosis of "trichinellosis"; 5 cases were minors, and a 39-year-old woman died. According to preliminary data, all admitted to the medical institution had eaten meat bought at a stall in the local market.

Representatives of Rospotrebnadzor [Federal Service for Consumer Protection and Human Welfare] withdrew the pork meat from the market and sent it for analysis. The results revealed violations of sanitary and epidemiological rules and regulations in the stall, which sells meat products. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SCRUB TYPHUS (INDIA): 26 October 2012, One more scrub typhus patient died in the state taking the death toll due to the disease to 14. The medical health and family welfare department confirmed a scrub typhus death in Bundi district after which teams of the department inspected the Nainwa area of the district. Bundi chief medical health officer Dr OP Verma on Wednesday [24 Oct 2012] claimed that the situation is not alarming, as no more cases of scrub typhus have been found in the area. The department officials had conducted a door-to-door survey of the area on Tuesday [23 Oct 2012] to find out if there are more cases of the disease in the area. The officials only found patients suffering from fever and other illness. The health department is taking help of the agriculture department to keep the area safe from various kinds of diseases due to unhygienic conditions. Dr Verma said the agriculture department would inform people in the area of what kind of chemicals they can use to kill mites and other microorganisms that cause illness. The cases of scrub typhus were first reported in Alwar and since then several cases have already been reported from 11 other districts. The other districts are Ajmer, Bharatpur, Bhilwara, Dausa, Dholpur, Jaipur, Karouli, Sikar, Sawai, Madhopur, and Tonk.A health department official said scrub typhus is a new disease [in the state?] and than 140 cases have already been reported from various parts of the state. So far, 14 deaths have been reported. The department has taken measures to control the spread of the disease, including creating awareness about the new disease. (Typhus fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

Protection and Human Welfare] announced that a previously suspected "anthrax" diagnosis of a local resident has been confirmed [but see below], and that he could have acquired it in the flood zone of Boguchanskaya hydroelectric power plant. Spokeswoman Natalia Krasnopeeva told the "FederalPress.Sibir" that a final diagnosis would be become clear tomorrow. "The preliminary diagnosis was confirmed in the resident of the Abansk district," said Natalia Krasnopeeva. "Specialists went to visit all places where a sick person stayed."

Allegedly, the sick person previously resided in the village of Kezhma, which was partially flooded by water filling the Boguchany Dam. The other day he came to town on personal business. There, his dog caught a muskrat and brought it to him. He butchered the muskrat and fed the dog. Some time later, the man had fever and boils. The sick man told the Krasnoyarsk bloggers, he suspects that this all happened because of poor cleaning of the reservoir bed. Animal cemeteries, which were not properly prepared for flooding, were inundated. (Tularemia is listed in Category A on the CDC List of Critical

TULAREMIA (RUSSIA): 27 October 2012, Today, 19 Oct 2012, employees of the Krasnoyarsk Rospotrebnadzor [Federal Service for Consumer

Biological Agents) *Non-suspect case

HANTAVIRUS (AMERICAS, ARGENTINA): 27 October 2012, In Oran, the results of the cause of death of a woman, a resident of Hipolito Yrigoyen, who is a possible case of [a] hantavirus [infection]. The diagnosis will be available in approximately 24 hours, when the results [of laboratory tests] on the samples sent in by the San Vicente de Paul Hospital will be sent from Buenos Aires, according to information issued by that hospital. The woman died on Monday [22 Oct 2012] in a private clinic in Oran. The 35-year-old woman was sent from the Eva Peron Hospital in Hipolito Yrigoyen due to a prolonged febrile disease. Se was married and a mother of 3 children who live in the 40 Viviendas neighborhood in that locality. "Regretfully, this cases was expected based on statistical predictions, especially in this season of the year. These are diseases for which there are no vaccines, so prevention is stressed," Enrique Medina, director of the Yrigoyen Hospital stated to El Tribuno. He also stated that they are investigating what caused the deterioration of the woman in recent days. "There is a team working on this matter, given that recently we had no locally acquired cases of hantavirus [infections] in the area," stated the official. So far this year [2012] in the Oran department, there are 20 cases of hantavirus [infections] with 2 deaths, Julio Cortez, Director of the San Vicente de Pau Hospital told El Tribuno. "Statistically, this case fits within predicted [case occurrences]. On average, we see some 24 cases of this disease annually," he stated. He added that the case fatality rate has declined to 19.5 per cent when in the 1980s - 1990s it was 42 per cent. "In these cases, the diagnosis just serves to provide a statistical [case] index. Give these symptoms, similar to influenza, treatment appropriate for [a] hantavirus [infection] as well as for leptospirosis is carried out. Medical attention during the initial hours of the disease is vital," stated Cortez. "The hantavirus [disease] is cause by the [a] hantavirus acquired from rodents, whereas leptospirosis is caused by a bacterium that also can be transmitted by pigs, dogs and cows," concluded Cortez (Emerging Infectious Diseases are listed in Category 3 on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia,	VHF
Lymphadenitis	decreased clotting factors, albuminuria ACUTE regional lymph node swelling and/ or	Plague
	infection (painful bubo- particularly in groin, axilla or neck)	(Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or	Anthrax (cutaneous) Tularemia
	generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointesti nal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain	Anthrax (inhalational) Tularemia Plague (pneumonic)
	EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE acute exacerbation of chronic illnesses.)	
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though	Not applicable
	unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births	Not applicable
	EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	